

Work Order ID 161803

Tuesday, May 23, 2017 9:42:19 AM

646.3001
B161803
REV N/C

161803

Page 1

Item ID: 646.3001

Revision ID:

Item Name: Lower Cable Cutter Assembly

Start Date: 5/31/2017 Start Qty: 4.00

Required Date: 6/9/2017 Req'd Qty: 4.00

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date: MAY 23 2017

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

646.3000

N/C

110

Pick Kit

0.00

110

Packaging

Memo

0.08

Packaging

JUL 18 2017

DAS
6
9-89

120

0.00

120

Small Fab

Memo

1.54

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.

A/R RTV LOCTITE 598:
exp. date: 137797

04/19/17

6x.

17/07/17

DAS
36
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 161803

Tuesday, May 23, 2017 9:42:19 AM

161803

Page 2

Item ID: 646.3001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Lower Cable Cutter Assembly

Start Date: 5/31/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 6/9/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.80

Quality Control

JUL 24 2017

140

Identify as per dwg & Stock Location **CC1023** 0.00***140***

Packaging

Memo

0.04

Packaging

***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND
REV***

JUL 27 2017

150

QC21- Final Inspection - Work Order Release 0.00

150

QC

Memo

0.08

Quality Control

JUL 27 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

Tuesday, May 23, 2017 9:42:18 AM

Page 1

Work Order ID: 161803

161803

Parent Item: 646.3001

646.3001

Parent Item Name: Lower Cable Cutter Assembly

Start Date: 5/31/2017

Required Date: 6/9/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21042L08 *MS21042L 08* Nut		Purchased	No			110	Each	913.0000	19	96 114		JUL 18 2017	DAS 6 9-89
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				GA				100					
				m135274				6		137851 x100			
				m135978				94					
				ST303				813					
				m137391				513		14			
				m137464				300					
646.3010 *646.3010* LH Half		Manufactured	No			110	Each	13.0000	1	46		JUL 18 2017	DAS 6 9-89
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				cck102				13		6			
				151681				13					
646.3011 *646.3011* RH Half		Manufactured	No			110	Each	6.0000	1	46		JUL 18 2017	DAS 6 9-89
									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				cck102				6		160407			
				155602				6					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
7 9 9 : 1 4					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Work Order ID: 161803

161803

Parent Item: 646.3001

646 3001

Parent Item Name: Lower Cable Cutter Assembly

Start Date: 5/31/2017

Required Date: 6/9/2017

Start Qty: 4.00

Required Qty: 4.00

646.3012 Manufactured No

110

Each

13.0000

1

**

646 3012

Lower Guide

Location

Loc Qty

Loc Code

CCK013

13

151652

3

156788

10

646.3013 Manufactured No

110

Each

7.0000

1

**

646 3013

Blade

Location

Loc Qty

Loc Code

cck102

7

155508

7

646.3014 Manufactured No

110

Each

12.0000

1

**

646 3014

Blade

Location

Loc Qty

Loc Code

cck102

12

151659

2

156806

10

646.3015 Manufactured No

110

Each

0.0000

1

**

646 3015

Blade

46

JUL 18 2017

DAS

6

9-89

6

JUL 18 2017

DAS

6

9-89

161696

40

JUL 18 2017

DAS

6

9-89

161726X1

40

160180

JUL 18 2017

DAS

6

9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date : _____		Step # : _____		QTY Effective : _____				MRB (QSI042) Approval																																																							
Description Work Order Deviation				Disposition				Completed By																																																							
Root Cause				FAULT CATEGORY																																																											
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
OTHER : _____																																																															

Picklist Print

Tuesday, May 23, 2017 9:42:18 AM

Page 3

Work Order ID: 161803

161803

Parent Item: 646.3001

646.3001

Parent Item Name: Lower Cable Cutter Assembly

Start Date: 5/31/2017

Required Date: 6/9/2017

Start Qty: 4.00

Required Qty: 4.00

MS27039-08-19

Purchased

No

110

Each

453.0000

19

**

MS27039-08-19

Screw

JUL 18 2017

DAS
6
9-88

Location

Loc Qty

Loc Code

GA

30

m135948

26

m137178

4

over006

200

m137464

200

ST277

223

m135865

5

m137320

18

m137361

200

13785/x100

14

NAS1149FN832P

Purchased

No

110

Each

1,971.000

38

**

NAS1149FN832P

Washer

JUL 18 2017

DAS
36
9-88

Location

Loc Qty

Loc Code

GA

358

M135058

208

M136182

40

M136866

110

ST263

1613

M135603

11

M137412

1602

67

137820

16/2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

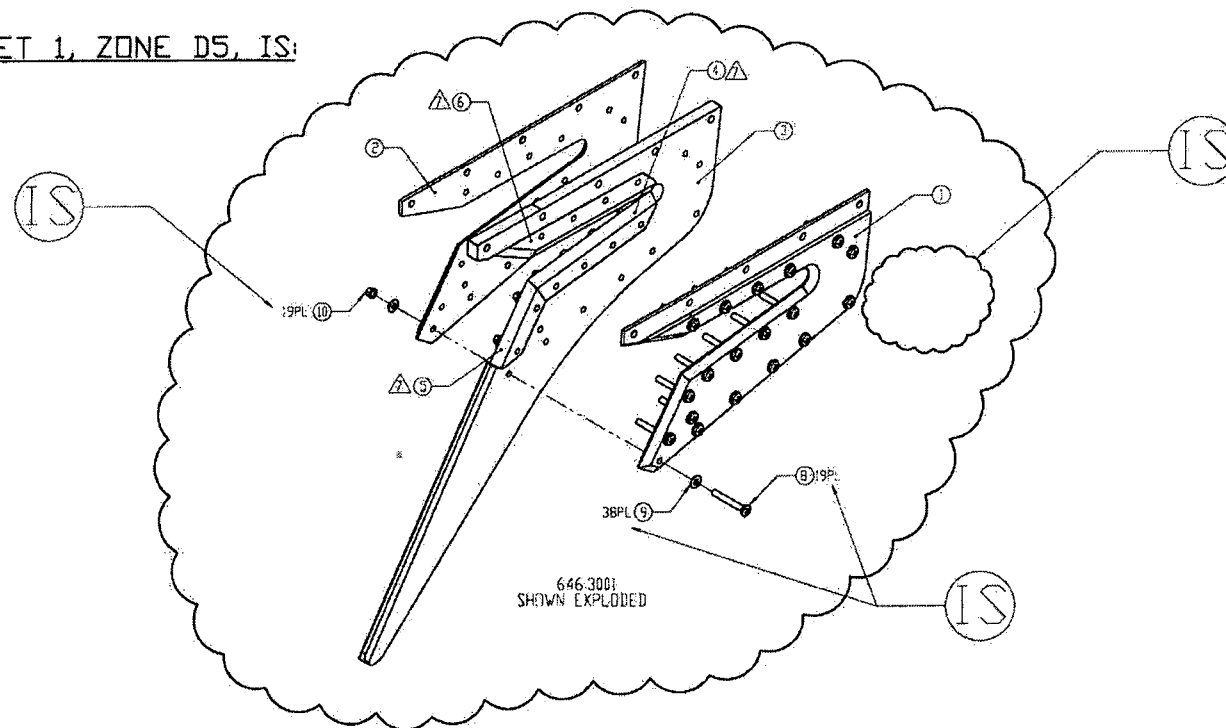
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
THIS IS A BLANK AREA FOR DESCRIPTION								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
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Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 02195		SHEET 1 OF 4	
	DWG NO. 646.3000	REV: N/C	PREPARED BY S. HUFF	DATE: 01/05/09
	EFFECT ON DWG ☐ INC. ☒ UNINC.			
	DWG TITLE: LOWER CUTTER ASSY			
APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF:	NEXT ORDER
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS		

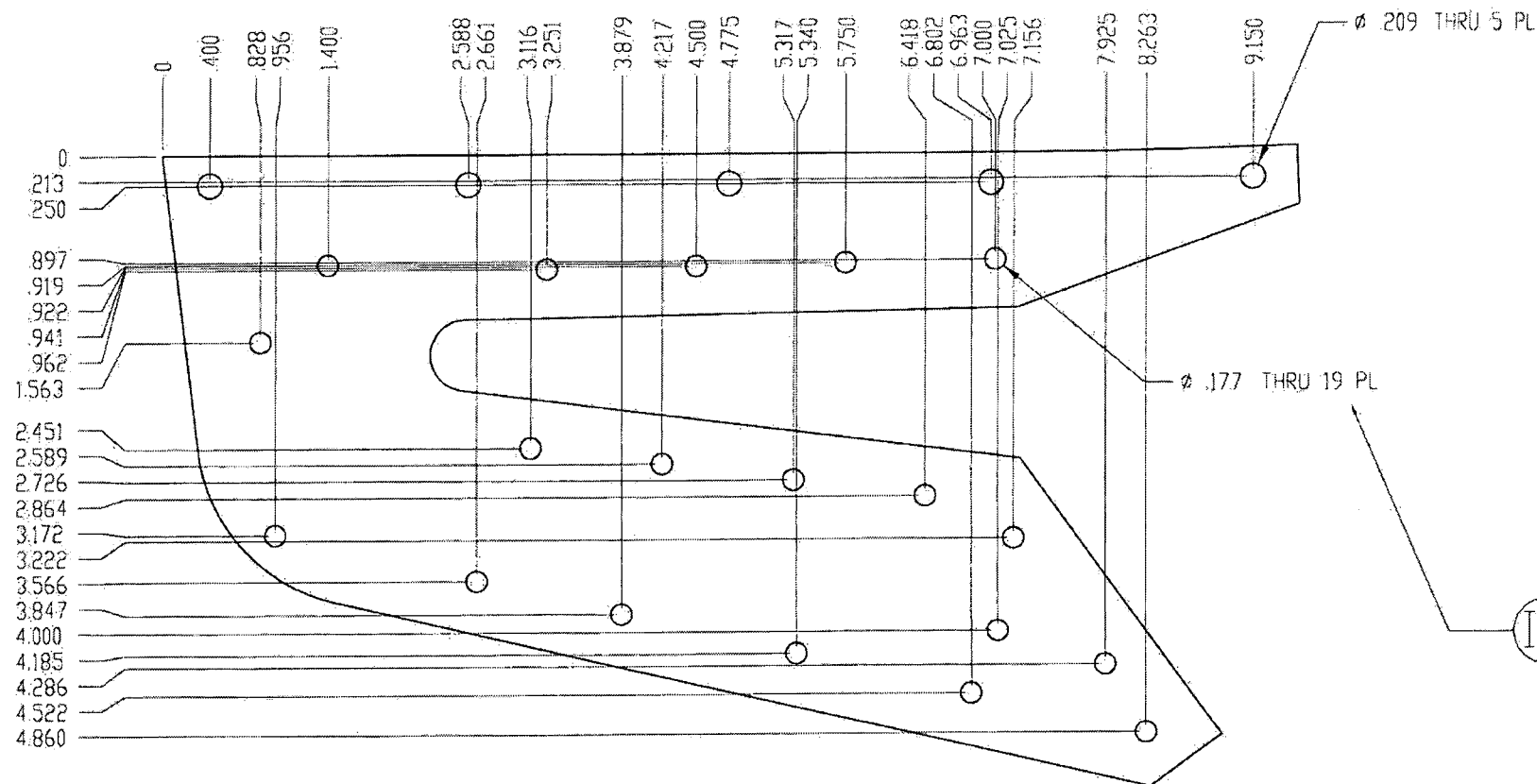
SHEET 1, ZONE D5, IS:



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 161803 HCS
170523

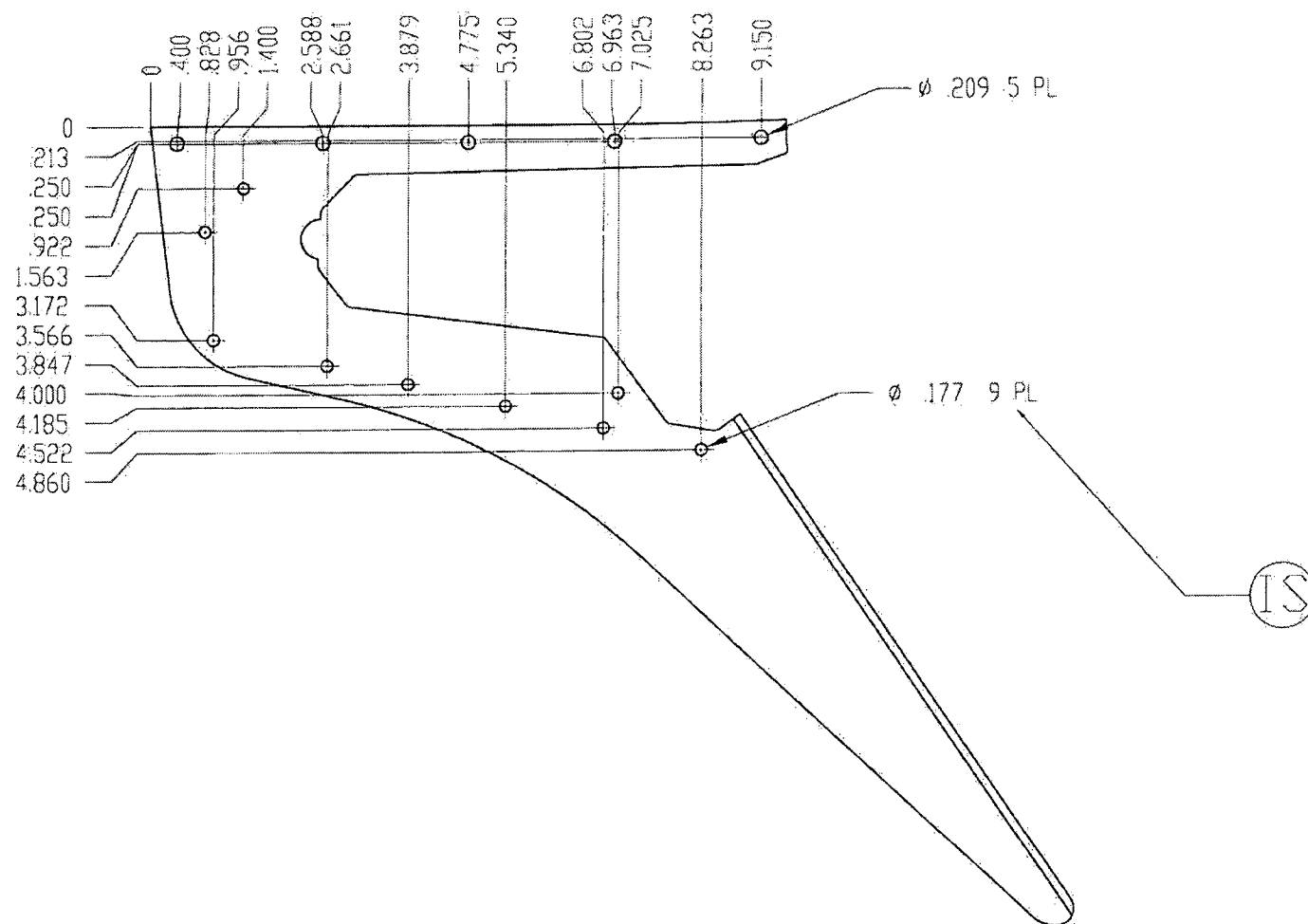
10	R	601.1541	19	LOCKNUT	MS21042L08
9	R	601.2764	38	WASHER	NAS1149FN832P
8	R	601.2765	19	SCREW	MS27039-0819
7	D	601.2766	2	RIVET	MS20470AD5-18
			.3001		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:					CHANGE CATEGORY
☐ MDL ☒ INSTALL INSTRU ☒ ICA ☐ FMS ☒ BOM					DER REVIEW REQUIRED
					☐ MAJOR ☒ MINOR
					☐ YES ☒ NO

SHEET 3 IS:



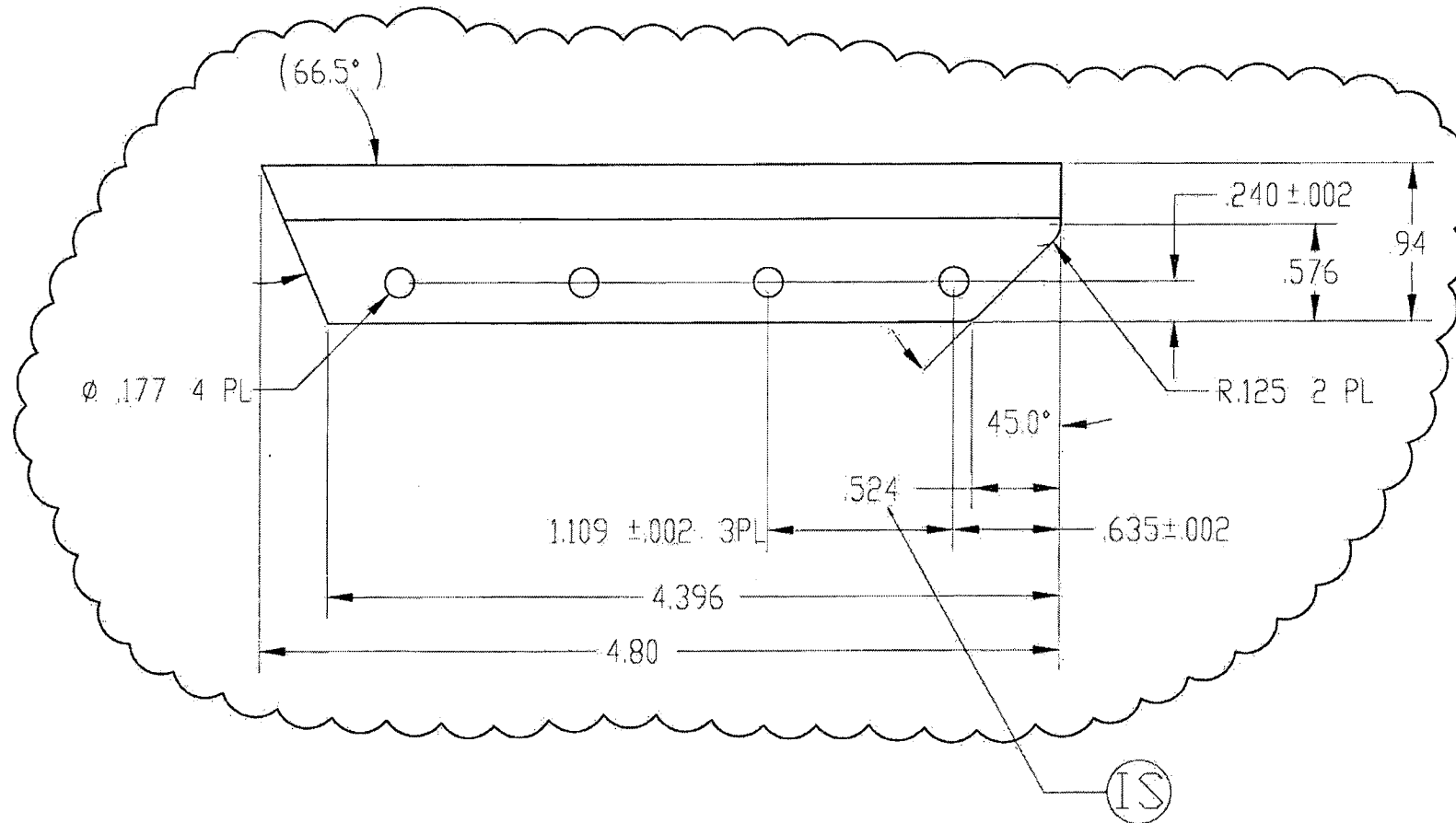
F/N	TC	PART NUMBER	QTY	DESCRIPTION

MATERIAL/SPECIFICATION

SHEET 5 IS:SECTION F-F 

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

SHEET 6, ZONE C4, IS:

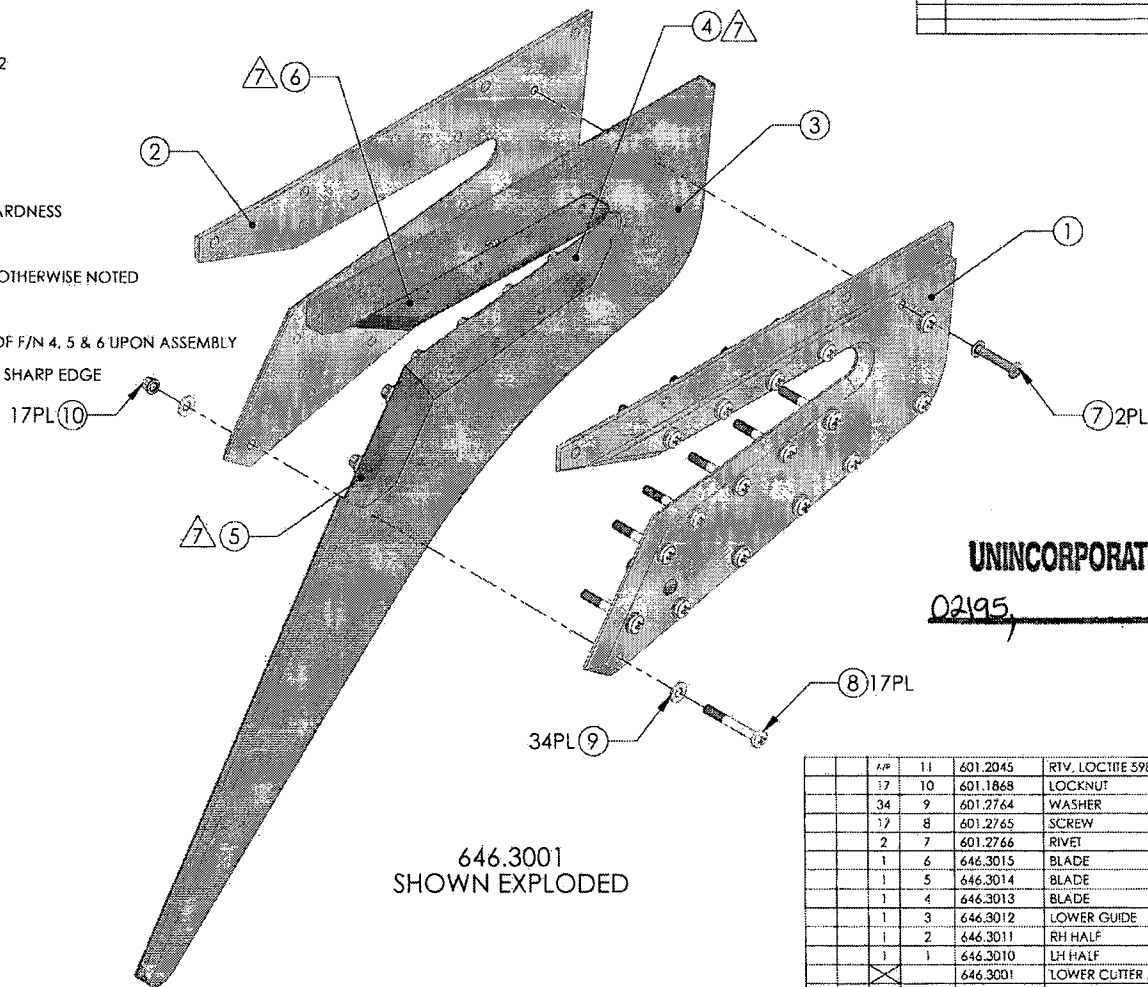


F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
- 3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- 4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
- 5 DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
- 6 IDENTIFY IAW MPP-120
- 7 APPLY F/N 11 AS REQUIRED TO ALL FAYING SURFACES OF F/N 4, 5 & 6 UPON ASSEMBLY
- 8 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE



UNINCORPORATED ECN(s)

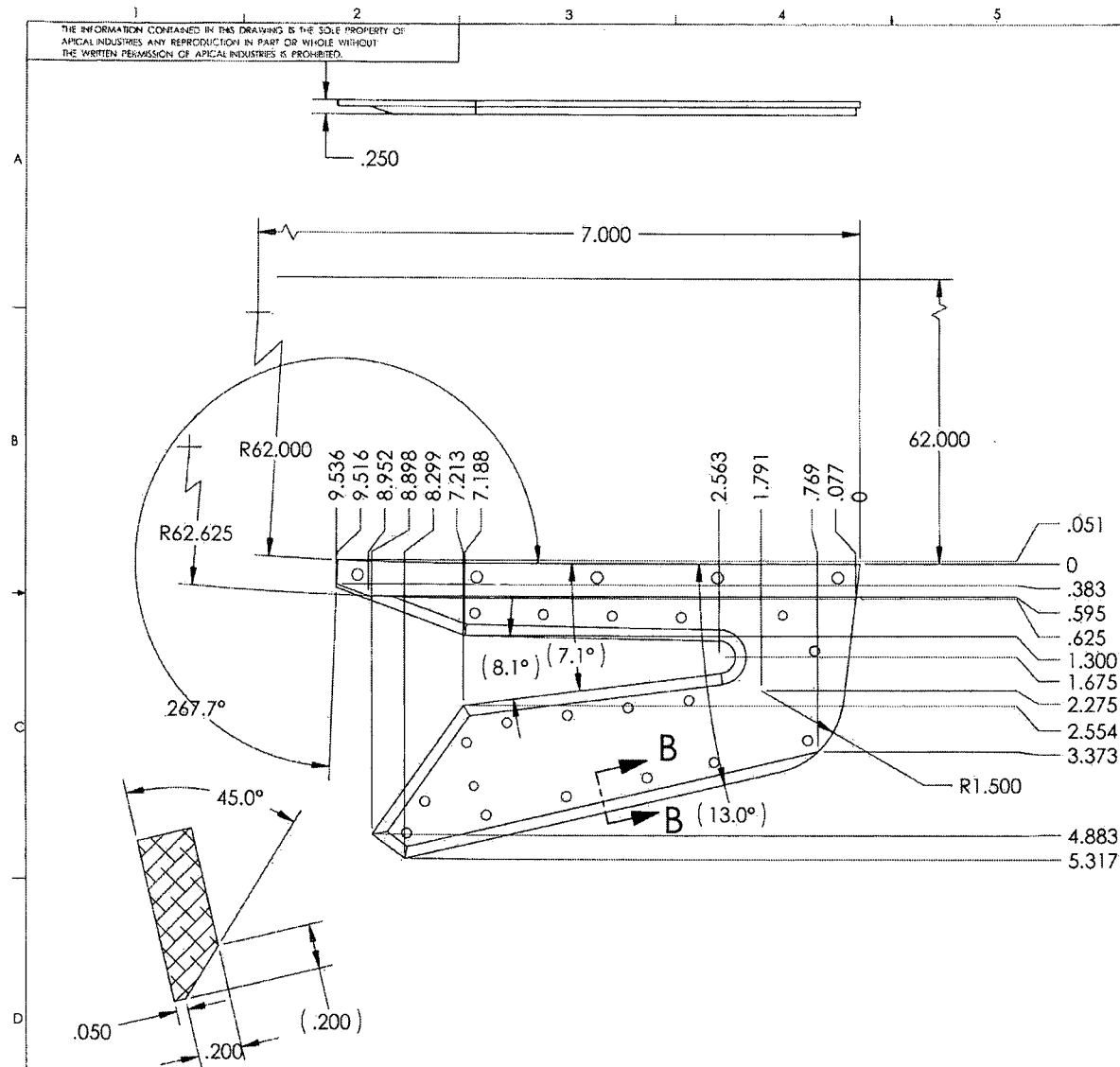
02195

646.3001
SHOWN EXPLODED

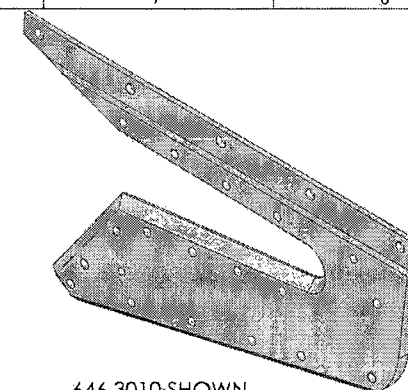
QTY	REV	DATE	DESCRIPTION	MATL	SPEC.
1	1	601.2045	RTV, LOCTITE 598		
17	10	601.1868	LOCKNUT	MS71043-05	
34	9	601.2764	WASHER	MS11148FAN832P	
17	8	601.2765	SCREW	MS27039-08119	
2	7	601.2766	RIVET	MS20407040-18	
1	6	646.3015	BLADE		
1	5	646.3014	BLADE		
1	4	646.3013	BLADE		
1	3	646.3012	LOWER GUIDE		
1	2	646.3011	RH HALF		
1	1	646.3010	LH HALF		
1		646.3001	LOWER CUTTER ASSY		
QTY	REV	DATE	DESCRIPTION	MATL	SPEC.
1	1	601.2045	RTV, LOCTITE 598		
17	10	601.1868	LOCKNUT	MS71043-05	
34	9	601.2764	WASHER	MS11148FAN832P	
17	8	601.2765	SCREW	MS27039-08119	
2	7	601.2766	RIVET	MS20407040-18	
1	6	646.3015	BLADE		
1	5	646.3014	BLADE		
1	4	646.3013	BLADE		
1	3	646.3012	LOWER GUIDE		
1	2	646.3011	RH HALF		
1	1	646.3010	LH HALF		
1		646.3001	LOWER CUTTER ASSY		

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA, 92056-3512 (760)724-5300
LOWER CUTTER ASSY
SCALE: NONE
SHEET 1 OF 8

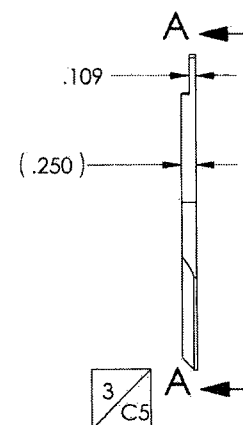
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SECTION B-B
TYP EDGE DETAIL



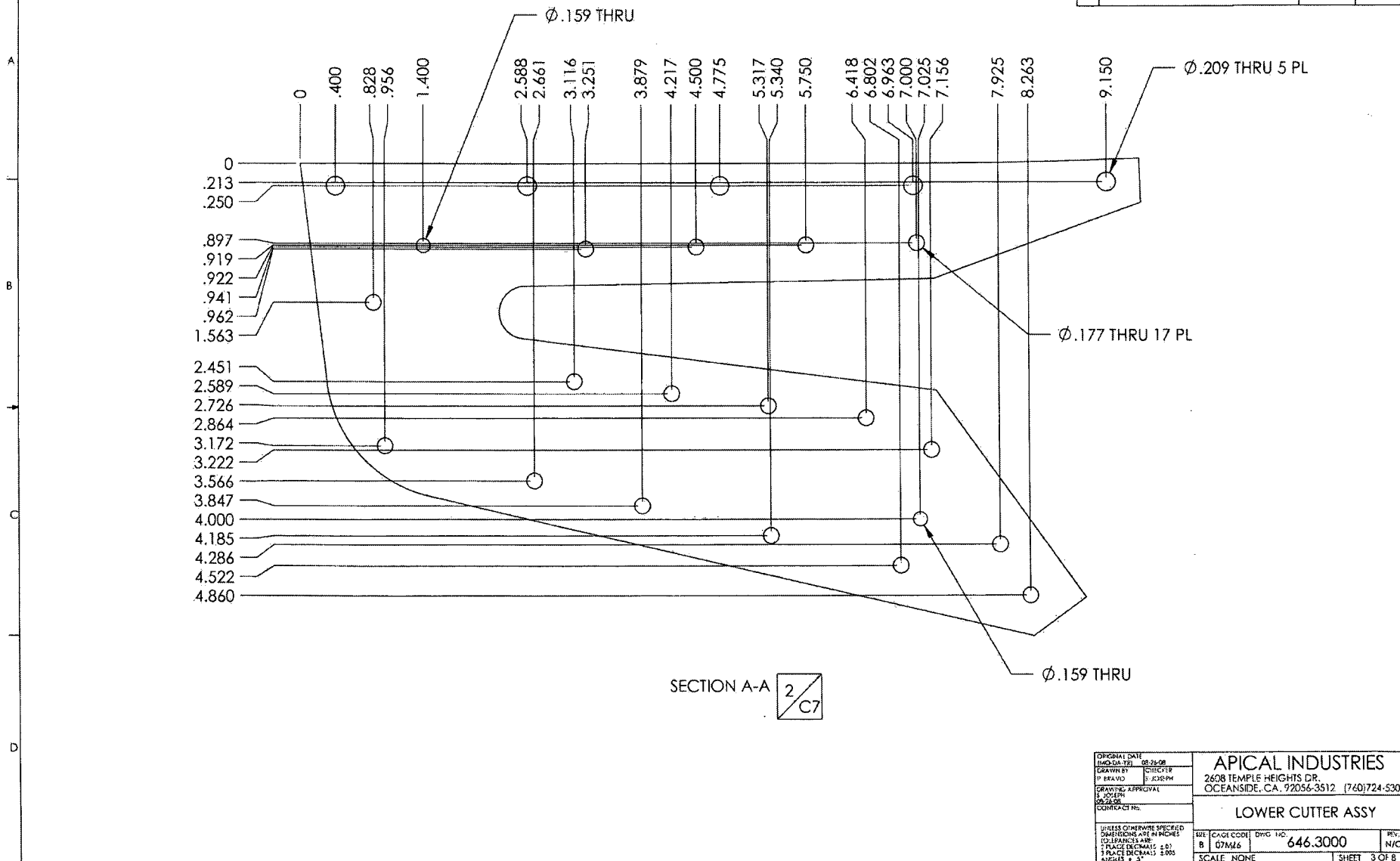
646.3010 SHOWN
646.3011 OPPOSITE



ORIGINAL DATE 10/24/76	APICAL INDUSTRIES			
DRAWN BY P. BRAVO	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300			
CHECKED BY S. JOSEPH	LOWER CUTTER ASSY			
DRAWING APPROVAL S. JOSEPH				
GENERAL NOTE: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± 5°				
	SIZE	CAGE CODE	QWC NO	REV
	B	07M76	646.3000	N/C
	SCALE: NONE		SHEET 2 OF 8	

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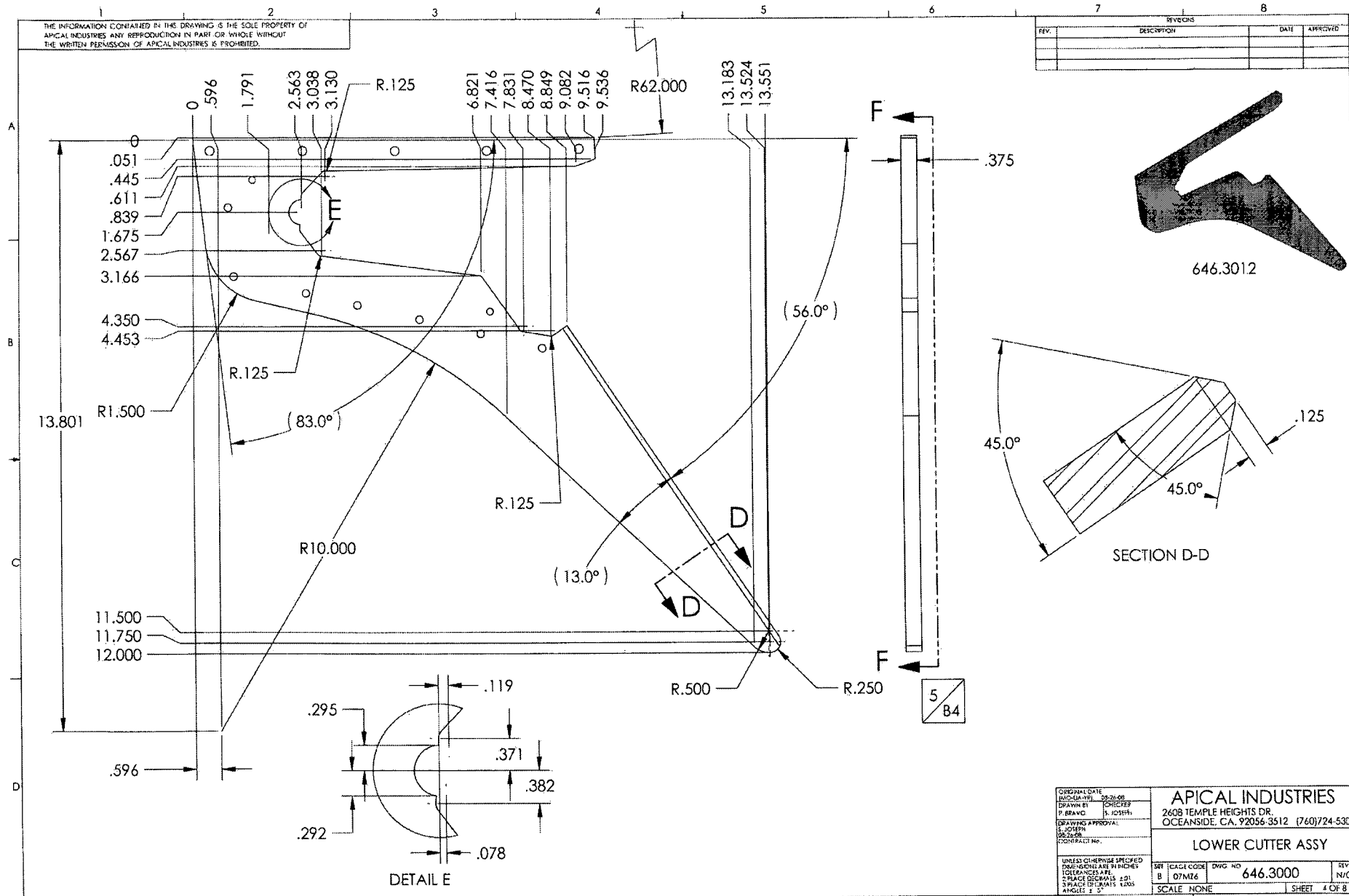
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE 08-28-08		APICAL INDUSTRIES	
DRAWN BY J. K. JACOB		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY J. K. JACOB		LOWER CUTTER ASSY	
DESIGNED BY J. K. JACOB		SCALE: NONE	
CONTRACT NO.		SHEET 3 OF 8	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES 1/16 0.001 0.001 0.001		REV. N/C	

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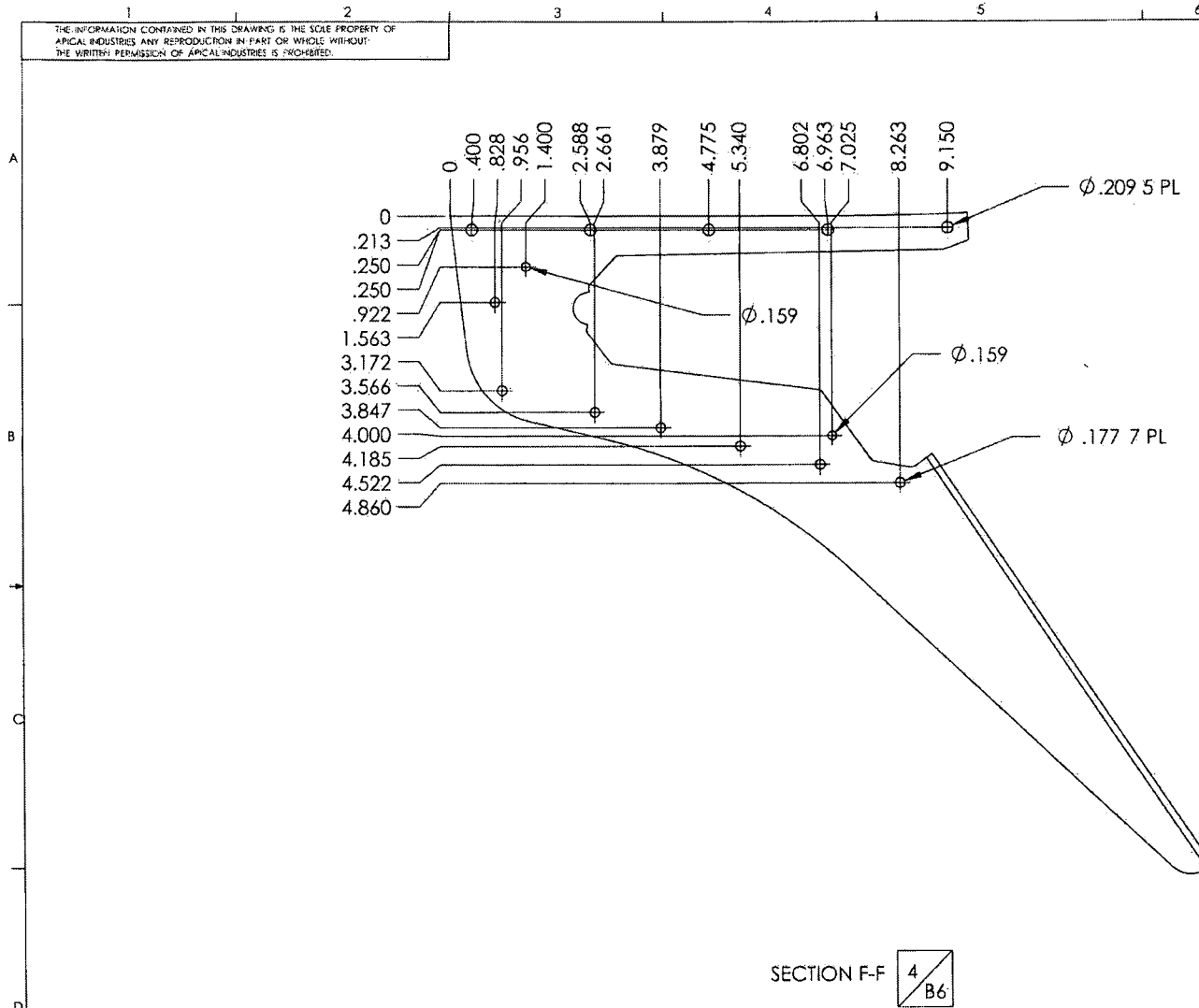
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE: 03-26-08 DRAWN BY: CHESTER P. BRAYO: 10-10-08 DRAWING APPROVAL: S. JOSEPH SCALE: NONE	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACE DECIMALS 2.01 2. PLACE DECIMALS 1.00 3. PLACE DECIMALS 1.00 ANGLES: 2.01	DWG. NO. 646.3000 REV. N/C
SCALE: NONE	SHEET 4 OF 8

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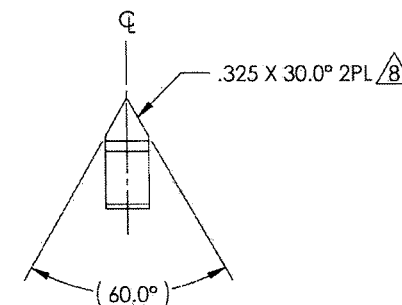
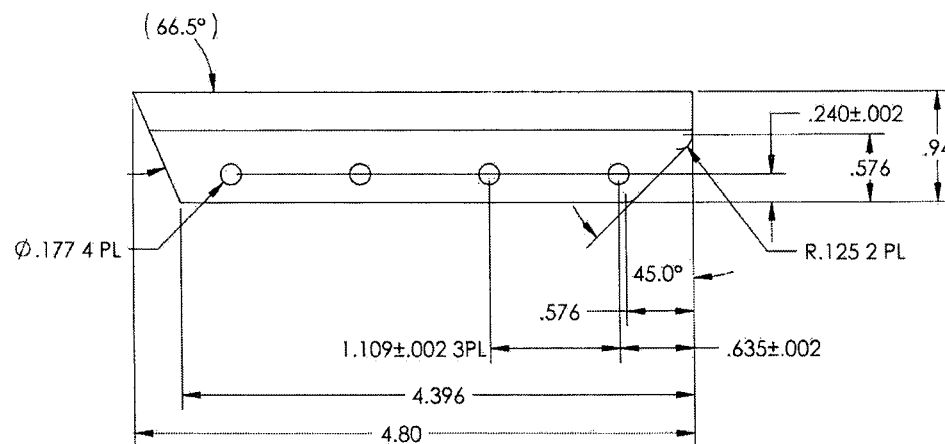
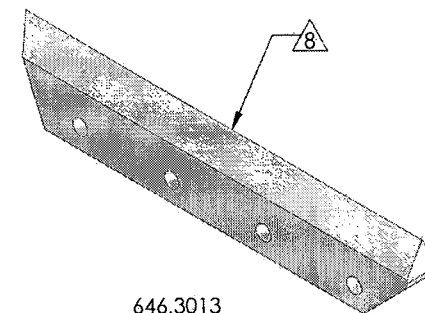
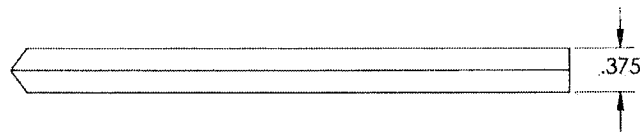
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE 08-26-08		APICAL INDUSTRIES	
DRAWN BY P. BRAYO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY S. JOSEPH		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL S. JOSEPH		LOWER CUTTER ASSY	
CONTRACT NO.		646.3000	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ±.01 ANGLES ±.2°		REV. N/C	REV. N/C
SCALE NONE		SHEET 5 OF 8	

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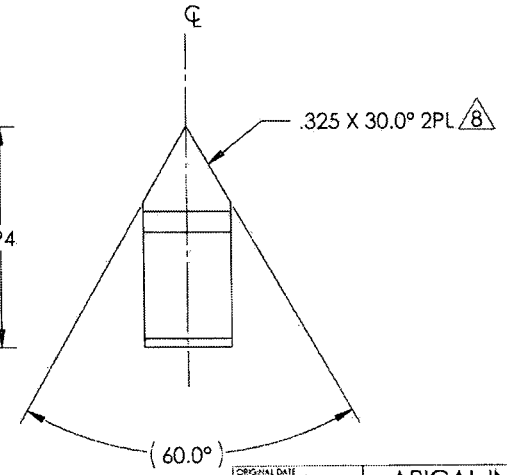
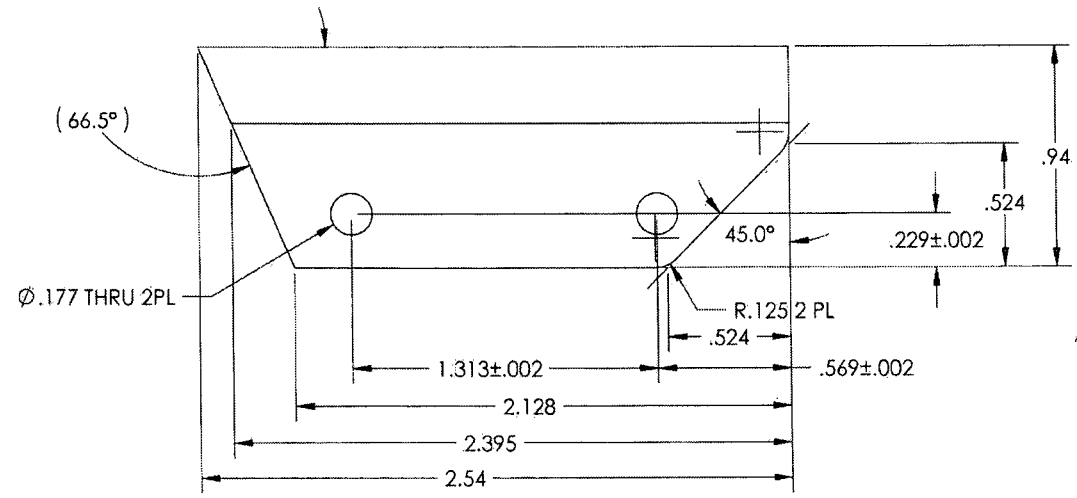
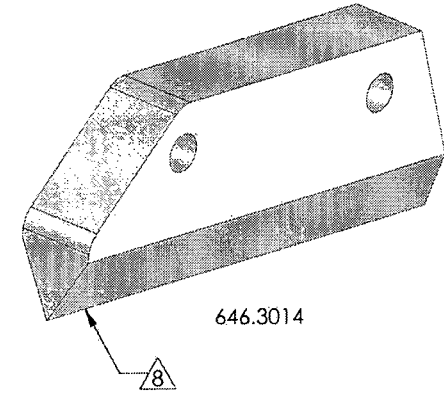
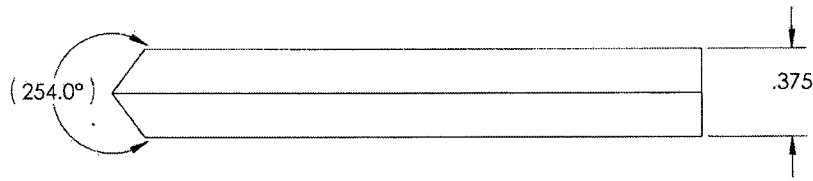
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE JANUARY 1975		DATE 08-26-08	
DRAWN BY P. BRAVO		CHECKED R. JOSEPH	
DRAWING APPROVAL T. JOSEPH		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°		SER 8	DWG NO. 646.3000
SCALE NONE		REV. N/C	
SHEET 6 OF 8		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 LOWER CUTTER ASSY	

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE 08-26-08
 DRAWN BY P. BRAVO
 CHECKED BY S. JOSEPH
 DRAFTER'S APPROVAL
 DATE
 CONTRACT NO.

APICAL INDUSTRIES
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LOWER CUTTER ASSY

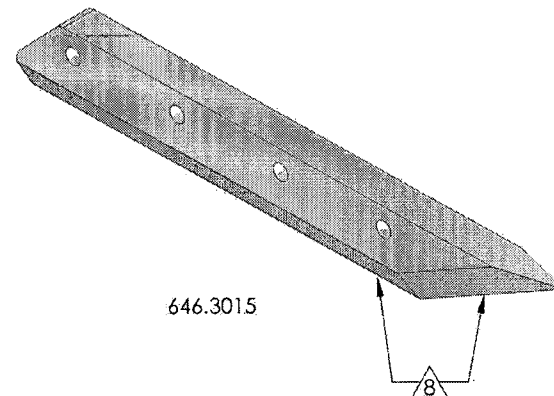
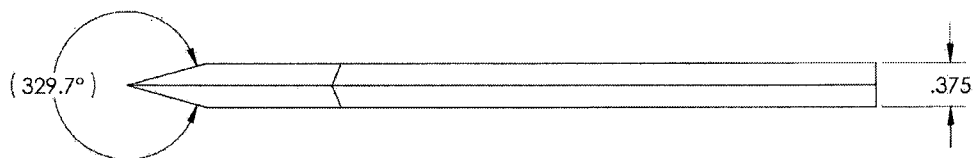
SCALE NONE SHEET 7 OF 8

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 TOLERANCES ARE:
 1 PLACE DECIMALS ±.01
 2 PLACE DECIMALS ±.005
 3 PLACE DECIMALS ±.001

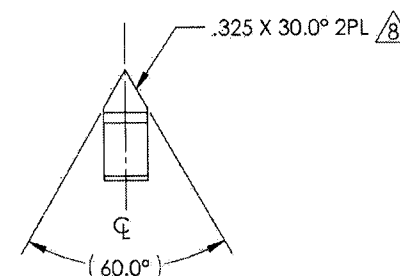
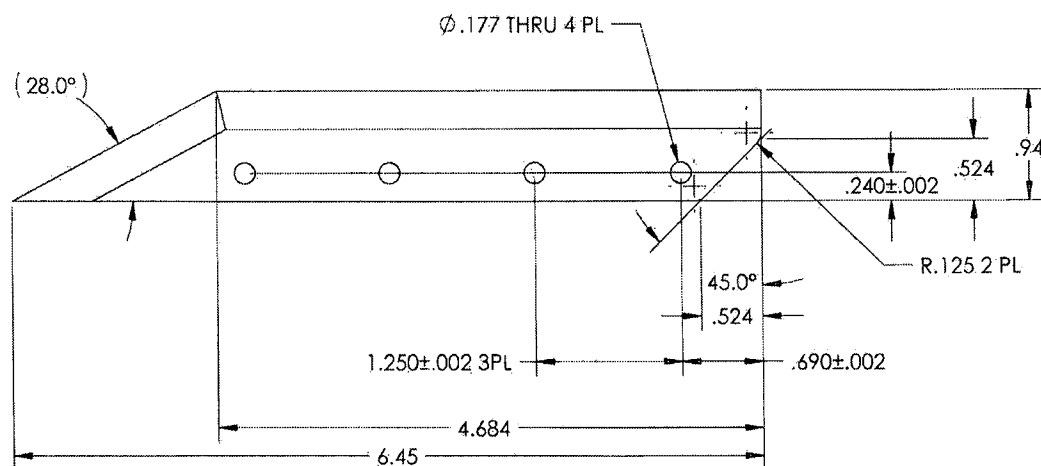
SHEET 7 OF 8

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



646.3015



ORIGINAL DATE: 09-24-00
 DRAWN BY: P. SPAYO
 CHECKED BY: S. JOSEPH
 APPROVED BY: S. JOSEPH
 CONTRACT NO.

APICAL INDUSTRIES
 2608 TEMPLE HEIGHTS DR.
 OCEANSIDE, CA. 92056-3512 (760) 724-5300

LOWER CUTTER ASSY

REV	DATE	DESCRIPTION	BY
B	07M26	646.3000	N/C

SCALE: NONE SHEET: 8 OF 8